

NWS FORM E-5

(11-88)

(PRES. by NWS Instruction 10-924)

U.S. DEPARTMENT OF COMMERCE**NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION****NATIONAL WEATHER SERVICE****HYDROLOGIC SERVICE AREA (HSA)****WFO Jackson, Mississippi****MONTHLY REPORT OF HYDROLOGIC CONDITIONS**

REPORT FOR:

MONTH

YEAR

October**2014**

SIGNATURE

TO: Hydrometeorological Information Center, W/OH2
NOAA / National Weather Service
1325 East West Highway, Room 7230
Silver Spring, MD 20910-3283

DATE

11/21/2014

When no flooding occurs, include miscellaneous river conditions, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (NWS Instruction 10-924)

☒ An X inside this box indicates that no river flooding occurred within this hydrologic service area.

Synopsis...

October was comparatively quiet overall. A couple of fronts passed through the area during the first half of the month and dropped a good deal of rain over the northern HSA (Hydrologic Service Area), but the back end of the month was relatively dry. The Greenwood and Greenville observation sites both measured over six inches of rainfall for the month. Meanwhile, the monthly rainfall totals for the southern two-thirds of the HSA were an inch or more below normal. Temperature-wise, the entire area averaged at least one whole degree above normal for the month.

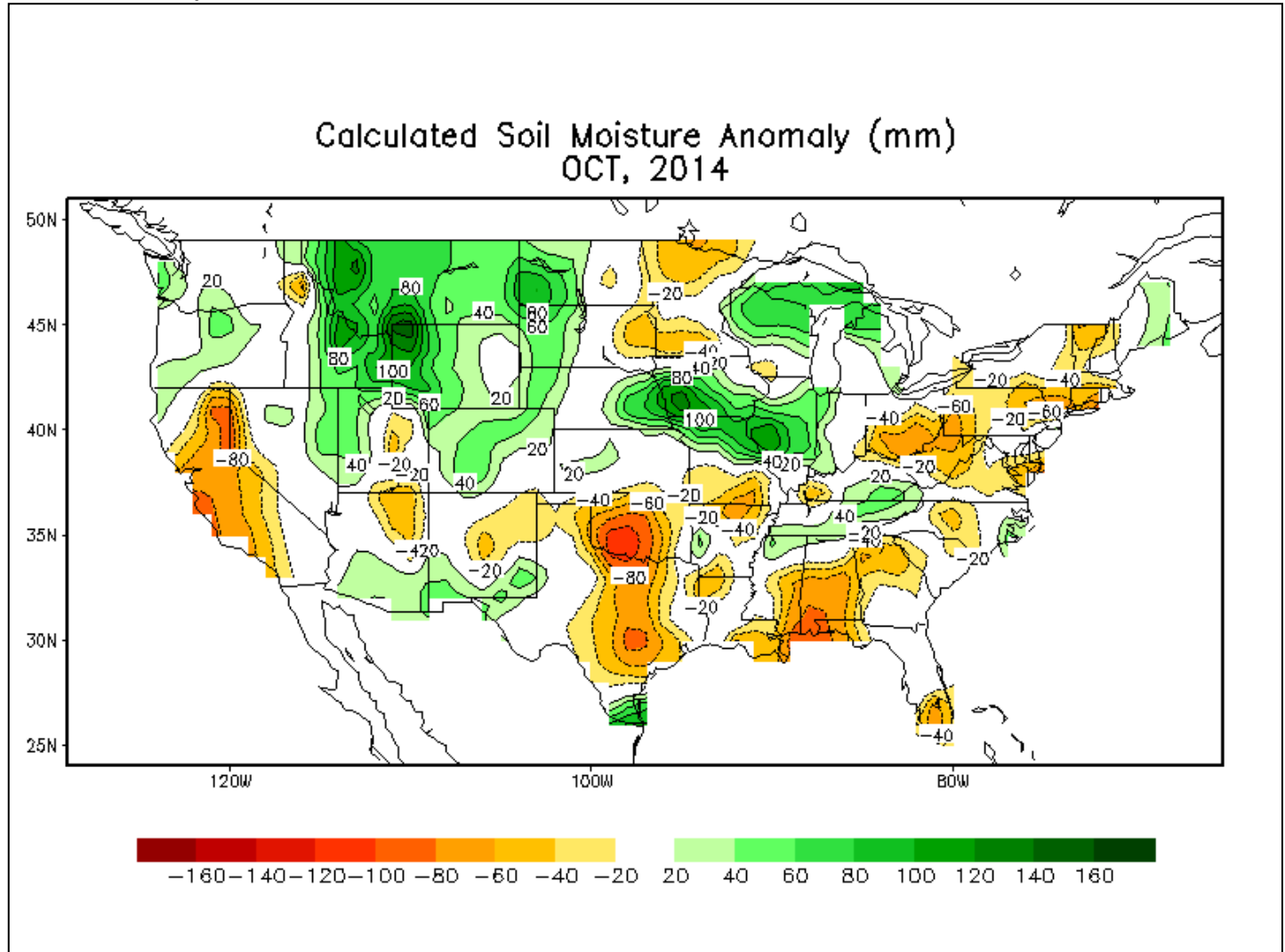
Now, the first front to pass through the HSA was on October 3rd. It brought a welcome, widespread inch of rainfall to the ArkLaMiss, with a few isolated locations receiving up to two inches of precipitation. After the departure of the front, temperatures cooled down to normal, autumn temperatures as high pressure occupied the South for a short time. The next front approached the area from the northwest on the 6th and produced an outflow boundary which brought rainfall right up to the HSA border. A few locations received up to a tenth of an inch of rainfall in the very far northwest HSA but nothing more anywhere else.

Another front approached the HSA on the 11th, again just bringing rainfall to the northwest parts of the area. The system stuck around for another two days and continued to drop occasional rain in the northwest HSA. Finally on the 14th, the associated cold front pushed through the entire area, dropping the last significant rainfall of the month. A widespread inch to an inch and a half was measured throughout the HSA.

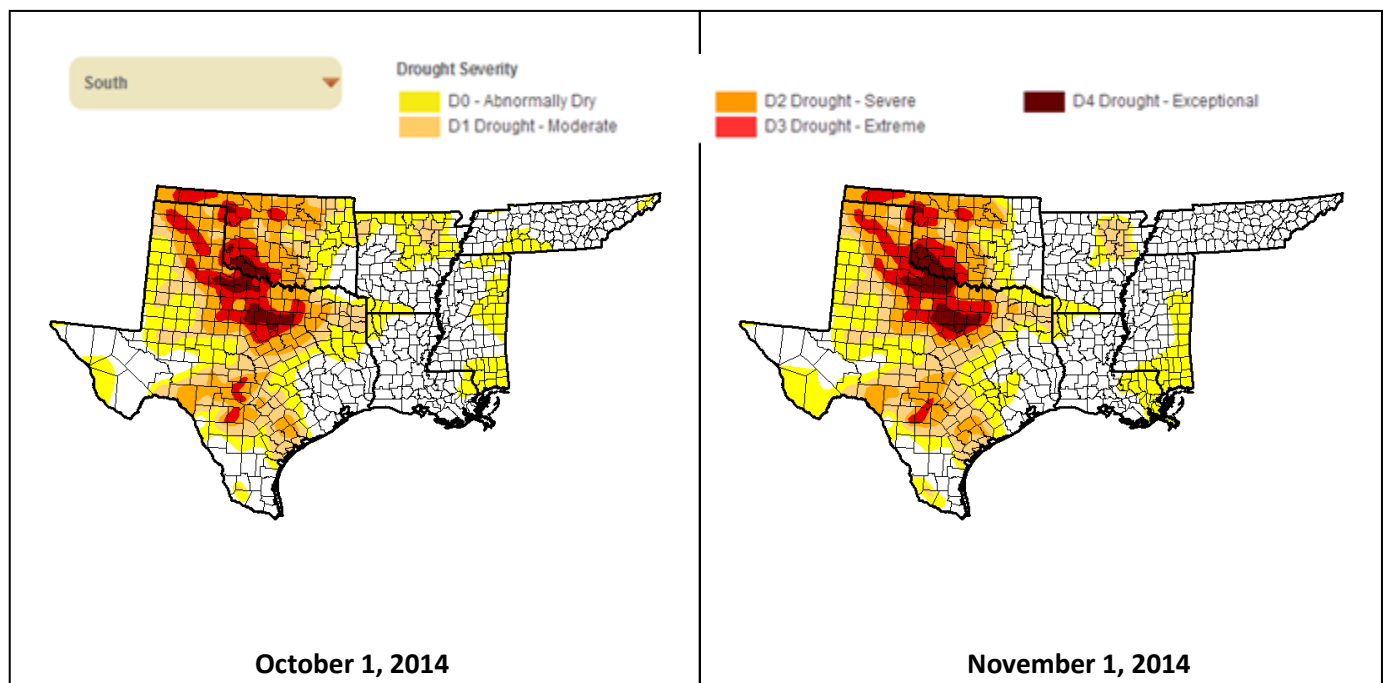
A very dry air mass moved in behind the front and did not allow any rainfall for two weeks within the HSA (much less any clouds). A couple of fronts passed through the area within that time frame; however, they were dry frontal passages. Finally on the 29th, a cold front passed through the area that managed to bring enough moisture to penetrate the dome of dry air over the Deep South. Locations in the north and the northwest HSA were the lucky ones and received from three-quarters and up to an inch of rainfall. The rest of the HSA was not so lucky and proceeded into November with hopes of rain to come.

River and Soil Conditions...

Soil Moisture Map:

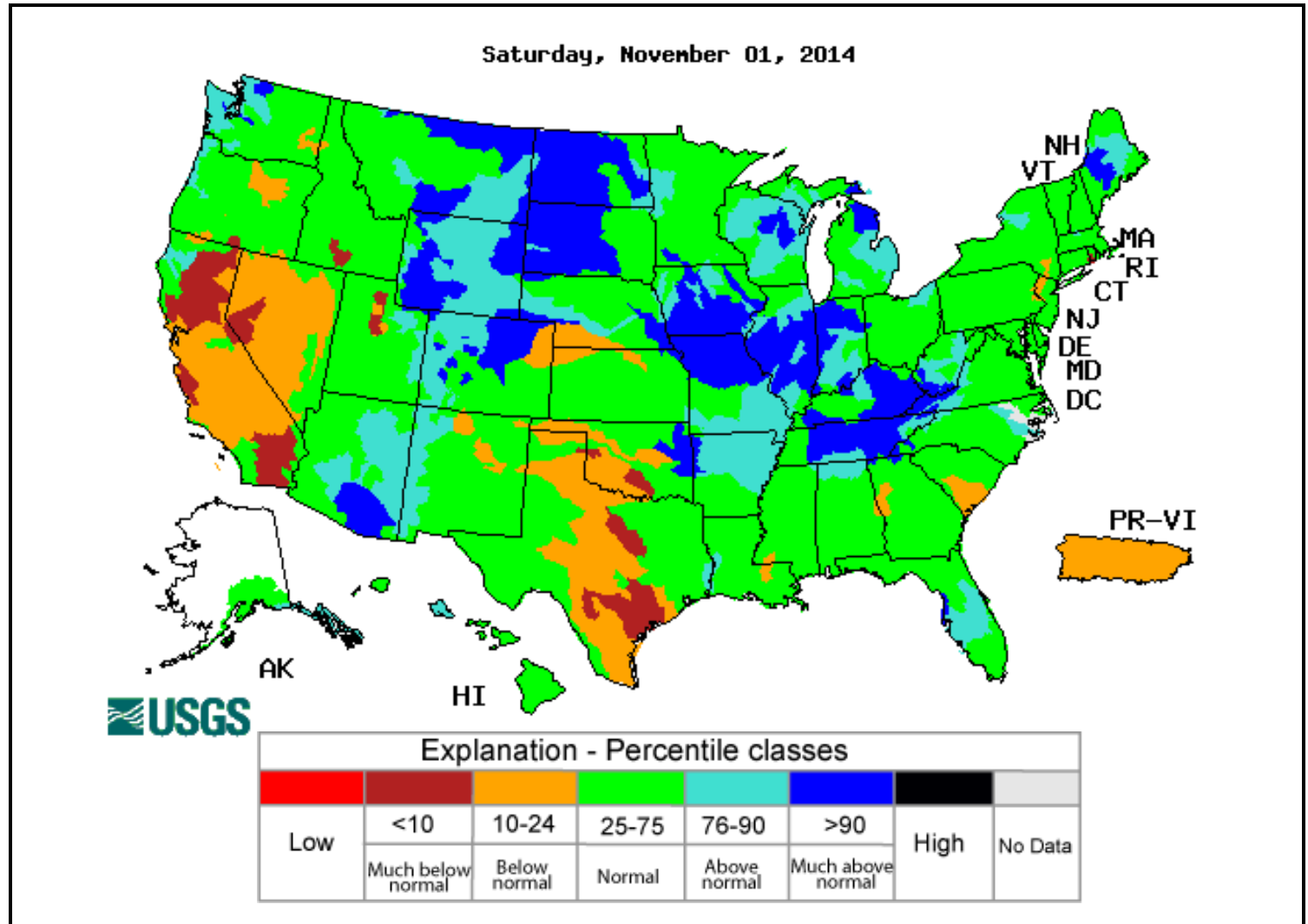


Drought Comparison:



Streamflow:

The United States Geological Survey's (USGS) October 2014 river streamflow records were compared with all historical October streamflow records. The average October streamflow was normal throughout the HSA.



River Conditions:

No flooding occurred along the river systems in the HSA. For the conditions of the Mississippi River from Arkansas City to Natchez, refer to the hydrographs on the next page.

Climatic Outlook and Flood Potential:

The climatic outlook favors below normal temperatures over the next three months for the entire HSA. In regards to precipitation, the outlook favors above normal chances for Northeast Louisiana and South Mississippi over the next three months and normal chances for the rest of the HSA, those along and north of the Highway 82 corridor. Thus, based on current soil moisture, streamflow, and the 3-month weather outlook, the flood potentials are as follows:

Pearl River System: Average.

Yazoo River System: Average.

Big Black River System: Average.

Homochitto River System: Average.

Pascagoula River System: Average.

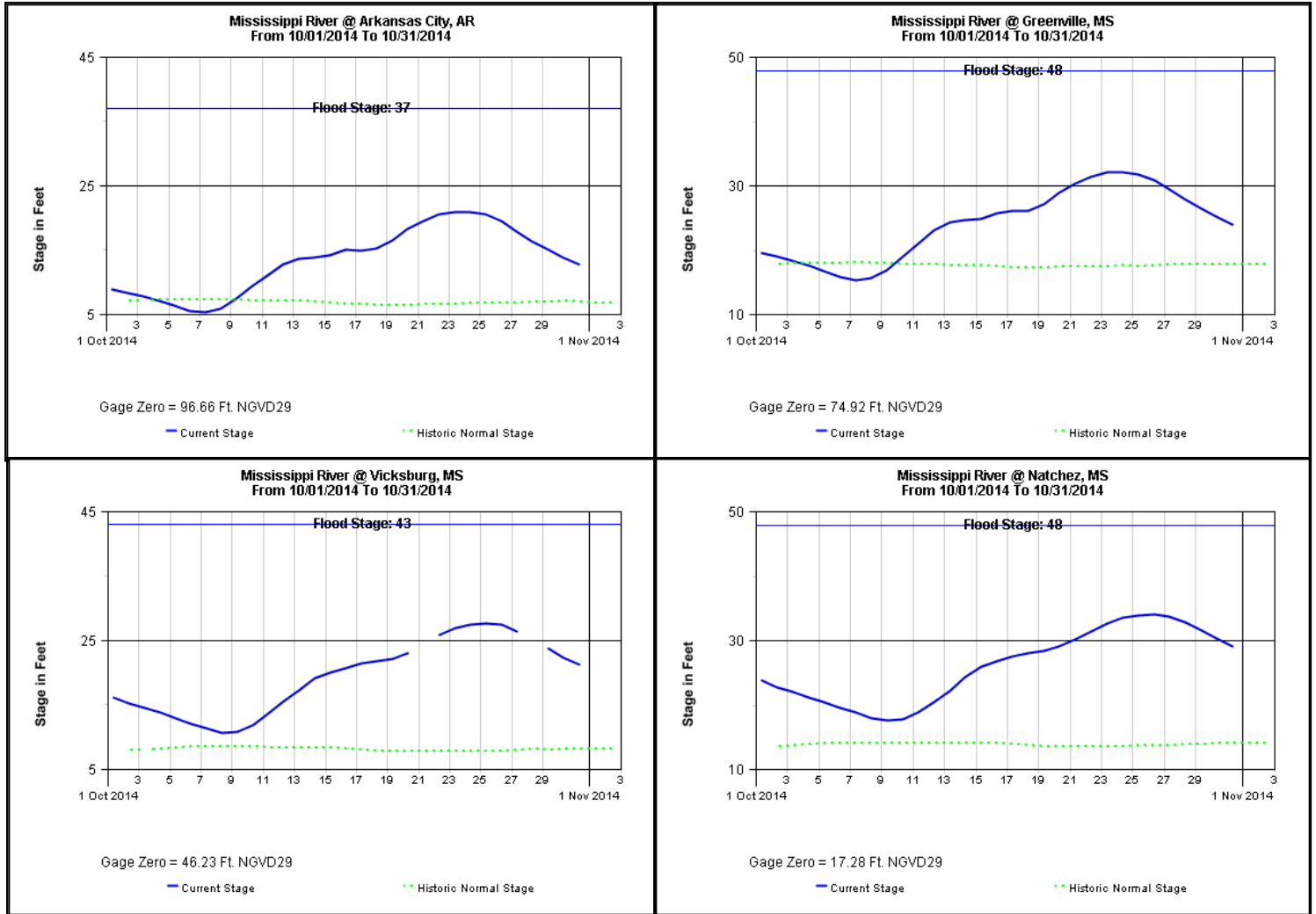
Northeast LA and Southeast AR: Average.

Tombigbee River System: Average.

Mississippi River: Average.

Mississippi River Plots October 2014

Plots Courtesy of the United States Army Corps of Engineers



Monthly Preliminary High and Low Stages:

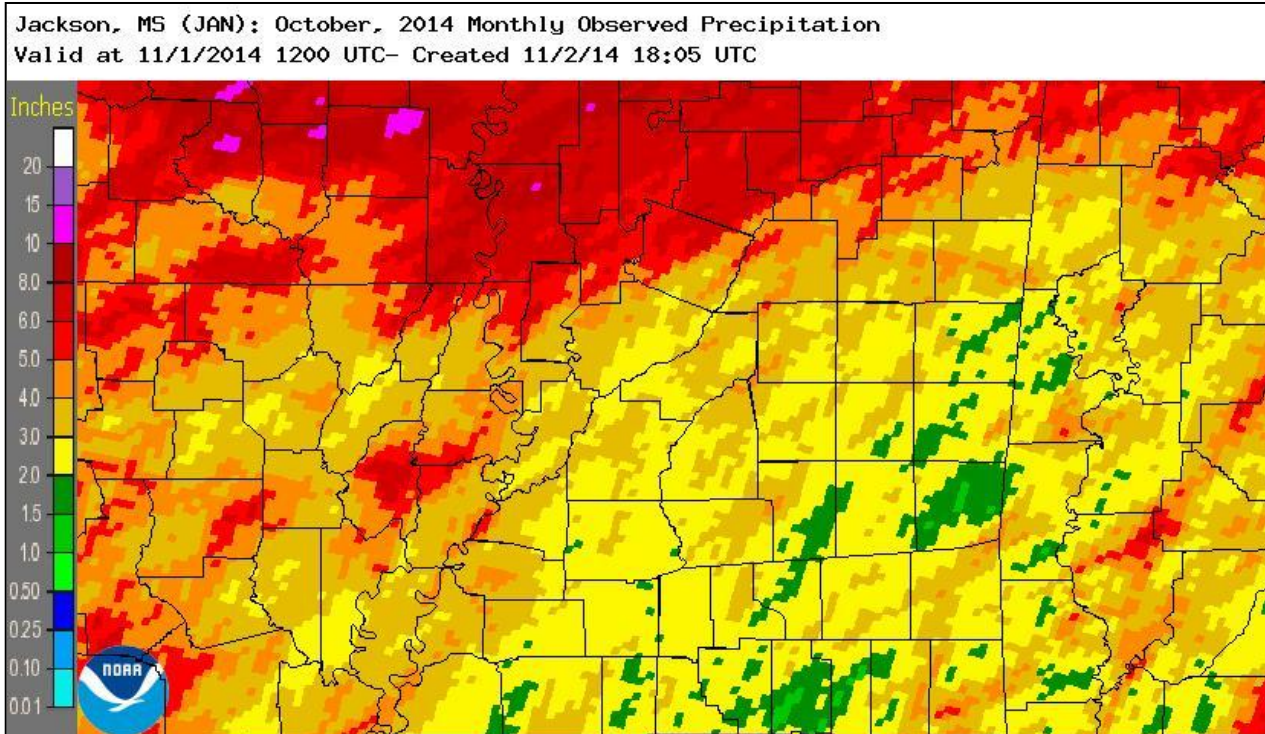
Location	Flood Stage (ft)	High Stage (ft)	Date	Low Stage (ft)	Date
Arkansas City	37	20.97	10/24	5.25	10/07
Greenville	48	32.28	10/24	15.42	10/07
Vicksburg	43	27.62	10/25	10.68	10/08
Natchez	48	34.08	10/26	17.64	10/09

Rainfall for the Month of October:

The largest rainfall amounts in the HSA from NWS Cooperative Observer reports during the period from 7 am on September 30th until 7 am on October 31st were: 5.57 inches at Eudora, AR; 8.46 inches at Cleveland, MS; 8.02 inches at Greenville, MS; 6.89 inches at Grenada, MS; 6.77 inches at Grenada Dam, MS; 6.57 inches at Dermott, AR; 6.43 inches at Tallulah, LA; 6.33 inches at Moorhead, MS; 6.30 inches at Winnsboro 2SE, LA; and 6.29 inches at Winona, MS.

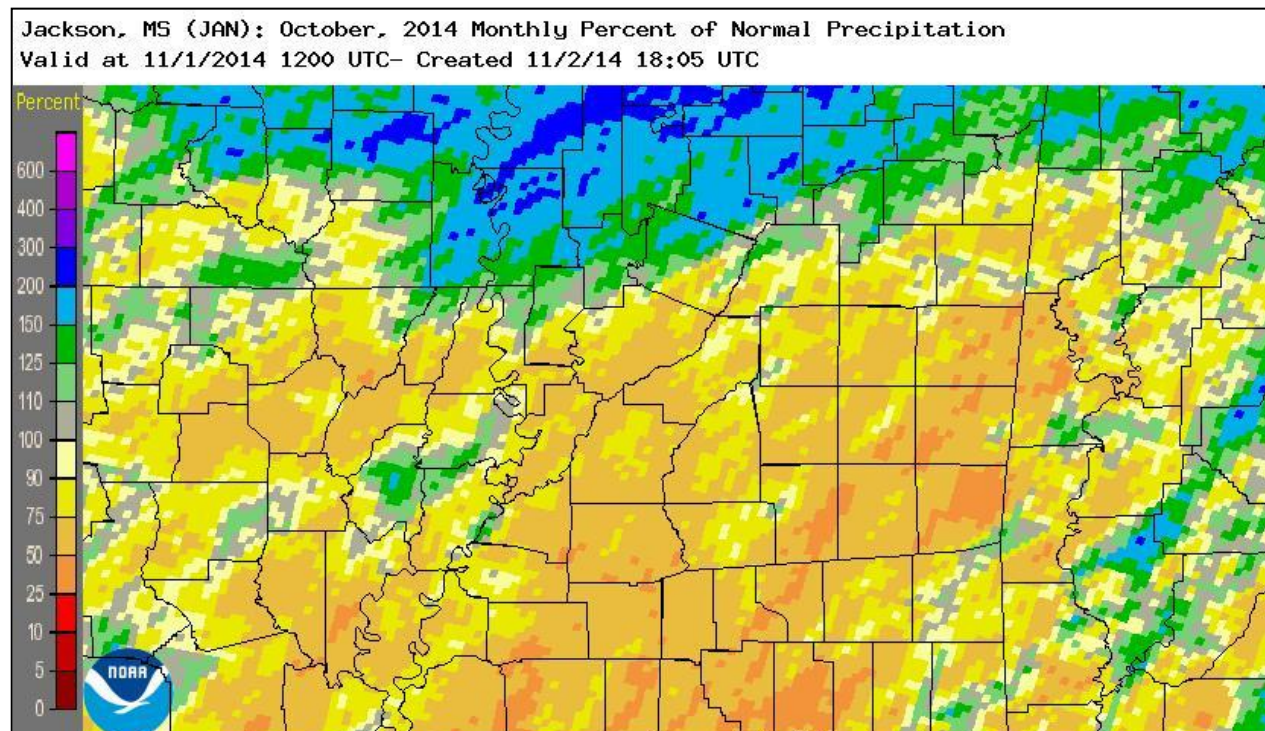
Some lesser Amounts: 1.65 inches at Pat Harrison Waterway's Archusa Water Park, MS; 1.68 inches at Hattiesburg 3SW, MS; 1.80 inches at Crandall, MS; 1.92 inches at Mize, MS; 1.96 inches at Purvis, MS; and 1.99 inches at Meadville 5SE, MS

October Rainfall Estimates:



Note: Observer rainfall and MPE may differ due to time differences.

October Percent of Normal Precipitation:



Note: Observer rainfall and MPE may differ due to time differences.

October Rainfall for Selected Cities:

City (Airport)	Rainfall	Departure from Normal	2014 Rainfall	2014 Departure from Normal
Jackson (KJAN)	2.98	-0.13	48.38	+4.15
Meridian (KMEI)	2.29	-1.47	42.34	-3.81
Greenville (KGLH)	6.04	+1.72	46.53	+4.57
Greenwood (KGWO)	6.40	+2.53	47.54	+5.94
Hattiesburg (KHBG)	1.50	-2.25	44.43	-5.56
Vicksburg (KTVR)	4.86	+0.19	50.10	+5.97

Total Flood Warning products issued: 0

Total Flood Statement products issued: 0

Total Flood Advisories MS River: 0

Daily Climate and Ag WX Products (AGO'S) issued: 31

Daily CoCoRaHS Rainfall Products (LCO'S) issued: 31

Daily River and Lake Summary Products (RVD'S) issued: 31

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&

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Note: Provisional stage and precipitation data were furnished with the cooperation of the Mississippi, Louisiana, and Arkansas National Weather Service Cooperative Observer Programs, United States Geological Survey (USGS), United States Army Corps of Engineers (USACE), Pearl River Valley Water Supply District (PRVWSD), Pat Harrison Waterway District, Pearl River Basin Development District, and the Mississippi Department of Environmental Quality.

cc: USGS Little Rock District
USGS Ruston District
USACE Mobile District
USACE Vicksburg District
USACE Mississippi Valley Division
USGS Mississippi District
SRH Climate, Weather and Water Division
Lower Mississippi River Forecast Center
Pearl River Valley Water Supply District
Hydrologic Information Center
Southern Region Climate Center
Pat Harrison Waterway District
Pearl River Basin Development District